

Authors Index

Recl. Trav. Chim. Pays-Bas 109, 595-597 (1990)

0165-0513/90/12595-03\$ 1.25

- Aalten (H.L.), Koten (G. van), Vrieze (K.) and Kerk-van Hoof (A.), The Hurltley reaction III. A reactivity study of copper (I) 2-halobenzoates either as pure reagents, or under Hurltley reaction conditions, and as a part of mixed (benzoato) (mesityl) copper (I) clusters, 46
- Aarnts (M.P.), see: Schakel (M.)
- Abbenhuis (H.C.L.), Grove (D.M.), Mier (G.P.M. van), Spek (A.L.) and Koten (G. van), Intramolecular amine coordination *versus* NMe C-H activation: The stereoselective synthesis of a tantalum(V)azacyclopropane complex, 361
- , Grove (D.M.), Sluis (P. van der), Spek (A.L.) and Koten (G. van), Tuning of tantalum alkylidene reactivity with a terdentate aryl amine ligand: Synthesis, structure and reactivity of $[\text{TaCl}_2\{\text{C}_6\text{H}_3(\text{CH}_2\text{NMe}_2)_2-2,6\}(\text{CHBu}^t)]$, 446
- Aben (R.W.M.) and Scheeren (J.W.), An overlooked short entry to 2-alkyliden-1,3-dioxolanes. Highly reactive ketene acetals, 399
- Al-Jalal (N.) and Gilbert (A.), Substituent effects on the photocycloaddition reactions of anisoles to acrylonitriles, 21
- Allen (J.C.), see: Feiters (M.C.)
- Alblas (F.J.), see: Westrenen (J. van)
- Alsters (P.L.), Teunissen (H.T.), Boersma (J.) and Koten (G. van), The oxygenation of cyclopalladated *N,N*-dimethylbenzylamine derivatives with *tert*-butyl hydroperoxide, 487
- Andel (M.A. van) and Engberts (J.B.F.N.), Rate-limiting deprotonation of (arylsulfonyl)methyl perchlorates in dichloromethane. Evidence for proton tunneling and the high dynamic basicity of HMPA in a nonaqueous solvent, 204
- Baan (J.L. van der), see: Louw (J. van der)
- Bakker (B.H.), Schonk (R.M.) and Cerfontain (H.), Sulfonation of norbornene with sulfur trioxide, 485
- Baldew (A.U.), see: Berg (E.M.M. van den)
- Banfi (S.), Montanari (F.) and Quici (S.), Steric and electron-withdrawing effects of substituents governing chemical stability and catalytic activity of Mn(III)-tetraarylporphyrins in $\text{HOCl}/\text{C}_{10}^-$ alkene epoxidations, 117
- Barendrecht (E.), see: Elzing (A.)
- Barrault (J.), see: Ghazi (M.)
- Bekkum (H. van), see: Okunowski (J.K.)
- , see also: Westrenen (J. van)
- Benninghoven (A.), see: Lub (J.)
- Bent (A. van der), see: Berg (E.M.M. van den)
- Beijer (N.A.), Vekemans (J.A.J.M.) and Buck (H.M.), Stereoselective reduction of benzoin by the NADH model 3-(dimethylcarbamoyl)-1,2,4-trimethyl-1,4-dihydropyridine, 434
- Berendsen (N.), see: Cuppen (Th.J.H.M.)
- Berg (A. van den), see: Sudhölter (E.J.R.)
- Berg (E.M.M. van den), Bent (A. van der) and Lugtenburg (J.), Synthesis of specifically deuterated 9- and 13-demethylretinals, 160
- , Jansen (F.J.H.M.), Goede (A.T.J.W. de), Baldew (A.U.) and Lugtenburg (J.), Chemo-enzymatic synthesis and characterization of L-tryptophans selectively ^{13}C -enriched or hydroxylated in the six-membered ring using transformed *Escherichia coli* cells, 287
- Bergveld (P.), see: Sudhölter (E.J.R.)
- Bickelhaupt (F.), see: Kraakman (P.A.)
- , see also: Louw (J. van der)
- Blanc (A.), see: Hamedí Sangsari (F.H.)
- Blasse (G.) and Brixner (L.H.), X-Ray-excited luminescence of organic gadolinium compounds, 172
- Boelens (H.), see: Feiters (M.C.)
- Boer (D.H.W. den), Made (A.W. van der), Zwaans (R.) and Lenthe (J.H. van), *Ab-initio* calculations on oxomanganese porphyrin chloride. II. An explanation of its reactions with alkenes, 123
- Boer (J.S.A.M. de) and Stam (C.H.), The influence of substituents on the geometry of the cyclopropane ring. IV. The molecular and crystal structure of 1-amino-1-phenylcyclopropane, 375
- Boere (B.B.), Mulder (P.P.J.), Cornelisse (J.) and Lugtenburg (J.), Reductive double alkylation of anthracene with lithium bromoacetate; synthesis of cyclopent [h]aceanthrylene, a novel dicyclopenta-fused hydrocarbon, 463
- Boersma (J.), see: Alsters (P.L.)
- , see also: Budzelaar (P.H.M.)
- Bolhuis (F. van), see: Kaptein (B.)
- Bont (H.B.A. de), Boom (J.H. van) and Liskamp (R.M.J.), *N,N*-diisopropyl-bis (4-chlorobenzyl) phosphoramidite: A versatile phosphorylating agent for the phosphorylation of hydroxy amino acids and preparation of protected phosphopeptides, 27
- Boom (J.H. van), see: Bont (H.B.A. de)
- , see also: Boons (G.J.P.H.)
- , see also: Broxterman (H.J.G.)
- , see also: Elie (C.J.J.)
- , see also: Veeneman (G.H.)
- , see also: Verduyn (R.)
- , see also: Zuurmond (H.M.)
- Boons (G.J.P.H.), Klein (P.A.M. van der), Marel (G.A. van der) and Boom (J.H. van), A practical route toward the preparation of 4,5:7/8-di-*O*-isopropylidene KDO ethyl ester, 273
- Borowiak (T.), see: Boryczka (S.)
- Boryczka (S.), Maślankiewicz (A.), Wyszomirski (M.), Borowiak (T.) and Kubicki (M.), Structure assignment of some 3,4'-diquinolinyl sulfides studied by Nuclear Overhauser Effects, X-ray analysis and reactions with sodium methoxide, 509
- Bos (M.), see: Veggel (F.C.J.M. van)
- Bouwman (E.), see: Tullemans (A.H.J.)
- Brandsma (L.), see: Lochmann (L.)
- Brixner (L.H.), see: Blasse (G.)
- Broos (J.) and Kellogg (R.M.), Modification of papain with a NAD(P)H analogue. Reactivity towards charged substrates and enhanced stability towards acid catalyzed hydration, 299
- Broxterman (H.J.G.), Kooreman (P.A.), Elst (H. van den), Roelen (H.C.P.F.), Marel (G.A. van der) and Boom (J.H. van), Analogues of uridine 5'-diphosphate glucose and guanosine 5'-diphosphate mannose, 583
- Bruggink (A.), see: Haest (A.D. van der)
- Budzelaar (P.H.M.) and Boersma (J.), Metal-Metal interactions in indium(I) and thallium(I) cyclopentadienyls, 187
- , Doorn (J.A. van) and Meijboom (N.), Orbital control in the reductive cleavage of tris (methoxyphenyl)phosphines, 253
- , and Doorn (J.A. van), Selective nucleophilic displacement of a methoxy group in 1,2,3-trimethoxybenzenes, 443
- Buck (H.M.), see: Beijer (N.A.)
- , see also: Koole (L.H.)
- Budding (H.A.), see: Tinnemans (A.H.A.)
- Bulten (E.J.), see: Timmer (K.)
- Bunton (C.A.), Dorwin (E.L.), Savelli (G.) and Si (V.C.), Hydrolysis of 2,4-dinitrophenyl phosphate catalyzed by single-chain, twin-tailed and bola-form surfactants, 64
- Buys (T.S.V.), Cerfontain (H.), Geenevasen (J.A.J.) and Stunnenberg (F.), Photochemistry of α -oxo oximes. Part 10. Photochemistry of three cyclic α -oxo oxime methyl ethers and their acyclic analogue at λ 254 nm, 491
- , Cerfontain (H.) and Geenevasen (J.A.J.), Photochemistry of α -oxo oximes. Part 11. Photochemical *E-Z* isomerization of two 2-(methoxyimino)-1-indanones. Evidence for excimer formation upon direct excitation at λ 300 nm, 531
- Cabasso (I.), see: Delaviz (Y.)
- Cappon (J.J.), Lie (T.S.) and Maat (L.), Synthesis of novel morphinan peptides based on ethenoinomorphinans and enkephalin residues containing L- and D-phenylalanine; conformational analysis and preliminary pharmacology (Chemistry of opium alkaloids, Part XXXIII), 413
- Cerfontain (H.), see: Bakker (B.H.)
- , see also: Buys (T.S.V.)
- , see also: Koeberg-Telder (A.)
- , see also: Stunnenberg (F.)
- Challa (G.), see: Viersen (F.J.)
- Chastrette (F.), see: Hamedí Sangsari (F.H.)
- Chastrette (M.), see: Hamedí Sangsari (F.H.)
- Cornelisse (J.), see: Boere (B.B.)
- , see also: Hempenius (M.A.)
- Cuppen (Th.J.H.M.), Berendsen (N.) and Laarhoven (W.H.), The photochemical rearrangement of 1,2-dihydronaphthalenes into 1,4-dihydronaphthalenes induced by amines, 168
- Dam (H.E. van), see: Okunowski (J.K.)
- Dekker (N.J.J.), see: Stegenga (S.)
- Delaviz (Y.), Cabasso (I.) and Smid (J.), Interactions between carbonyl-containing compounds and bismuth trihalides. A spectroscopic investigation, 176
- Doorn (J.A. van) and Heijden (H. van der), Phosphino-stabilized allyl anions and trimethylenemethane dianions and trimethylenemethane dianions, 302
- , see: Budzelaar (P.H.M.)
- Doren (H.A. van), Geest (R. van der), Kellogg (R.M.) and Wynberg (H.), A comparative study of the liquid-crystalline behavior of three homologous series of 1,2-propanediol derivatives, 197
- Dorwin (E.L.), see: Bunton (C.A.)
- Dreef (C.E.), see: Verduyn (R.)
- Drenth (W.), see: Made (A.W. van der)
- , see also: Sielcken (O.E.)
- Driessen (W.L.), see: Tullemans (A.H.J.)
- Ebens (R.) and Kellogg (R.M.), 1-Aryl-2,2-dimethyl-1,3-propanediols as chiral auxiliaries. Acetal formation with α , β -unsaturated aldehydes and analysis of the stereochemistry of cyclopropanation, 552
- Eeken (P.J.K.M.), see: Kraakman (P.A.)
- Eissink (I.M.), see: Verboom (W.)
- Elie (C.J.J.), Hoogerhout (P.), Muntendam (H.J.), Werken (G. van de), Marel (G.A. van der) and Boom (J.H. van), Synthesis of a spacer-containing trimeric fragment of the capsular polysaccharide from *Escherichia coli* K100, 467
- , see: Verduyn (R.)
- Elst (H. van den), see: Broxterman (H.J.G.)
- , see also: Veeneman (G.H.)
- Elzing (A.), Putten (A. van der), Visscher (W.) and Barendrecht (E.), Models for the absorption of dioxygen on metal chelates, 31
- Engberts (J.B.F.N.), see: Andel (M.A. van)
- Erkelens (C.), see: Gebhard (R.)
- Fahmy (N.) and Hanack (M.), Synthesis and characterization of μ -cyano-(octaethylporphyrinato)cobalt (III), 235
- Feiters (M.C.), Boelens (H.), Veldink (G.A.), Vliegthart (J.F.G.), Navaratnam (S.), Allen (J.C.), Nolting (H.-F.) and Hermes (C.), X-Ray absorption spectroscopic studies on iron in soybean lipoxygenase: a model for mammalian lipoxygenases, 133
- Foppen (M.-A.E.), Lange (Y.M. de), Rantwijk (F. van), Maat (L.) and Kieboom

- (A.P.G.), Reversal of an enzymatic decarboxylation: Thiamin mediated carboxylation of acetaldehyde into pyruvic acid, 359
- Fossatelli (M.), see: Lochmann (L.)
- Gebhard (R.), Hoef (K. van der), Lefeber (A.W.M.), Erkelens (C.) and Lugtenburg (J.), Synthesis and spectroscopy of ($^{14}\text{-}^{13}\text{C}$)- and ($^{15}\text{-}^{13}\text{C}$)spheroidene, 378
- Geenevasen (J.A.J.), see: Buys (T.S.V.)
- Geest (R. van der), see: Doren (H.A. van)
- Gerritsen (A.W.), see: Heide (E. van der)
- Ghazi (M.) and Sachtler (W.M.H.), Study of propene metathesis on $\text{MoO}_3\text{-}\gamma\text{-Al}_2\text{O}_3$ catalysts; effect of diazomethane decomposition, 77
- , Menezo (J.C.) and Barrault (J.), CO_2 hydrogenation on nickel based catalysts supported on alumina, 332
- Gilbert (A.), see: Al-Jalal (N.)
- Goede (A.T.J.W. de), see: Berg (E.M.M. van den)
- González Rosende (M.E.), see: Sepúlveda-Arques (J.)
- Goor (G.), see: Strukul (G.)
- Goubitz (K.), see: Jonker (S.A.)
- Graaf (R.A.G. de), see: Tullemans (A.H.J.)
- Gramain (J.-C.), Jeandrau (J.-P.), Lemaire (J.) and Remuson (R.), Photo-reduction of aryl ketones by amides, lactams and various nitrogen-containing heterocycles, 325
- Grove (D.M.), see: Abbenhuis (H.C.L.)
- Haas (M.P. de), see: Pol (J.F. van de)
- Haest (A.D. van der), Wynberg (H.), Leusen (F.J.J.) and Bruggink (A.), Towards a rational design of resolving agents. Part II. Correlation between resolution results and physical properties of diastereomeric salts, 523
- Hamedi Sangsari (F.H.), Chastrette (F.), Chastrette (M.), Blanc (A.) and Mattioda (G.), The acetalization of glyoxal by vicinal diols, 15
- , Chastrette (F.), Chastrette (M.), Blanc (A.) and Mattioda (G.), Competitive hemiacetalization and acetalization: cross-linking of cellulose by glyoxal, 419
- Hanack (M.), see: Fahmy (N.)
- Haveren (J. van), see: Westrenen (J. van)
- Heeres (H.J.) and Teuben (J.H.), Synthesis and ligand exchange reactions of (pentamethylcyclopentadienyl) lanthanum aryloxides, 226
- Heide (E. van der), Schenk (J.), Gerritsen (A.W.) and Scholten (J.J.F.), Kinetics and mechanism of the gas-phase oxidation of styrene to benzaldehyde, acetophenone and *trans*-cinnamaldehyde over a heterogeneous surface-vanadate Wacker catalyst, 93
- Heijden (H. van der), see: Doorn (J.A. van)
- Heijdenrijk (D.), see: Jonker (S.A.)
- Hempenius (M.A.), Lugtenburg (J.) and Cornelisse (J.), Synthesis and photo-reactions of some spiro[cycloalkanephthalenes], 403
- Hermes (C.), see: Feiters (M.C.)
- Hoef (K. van der), see: Gebhard (R.)
- Hoefnagel (A.J.) and Wepster (B.M.), Substituent effects. 13. Anomalous dissociation constants in water-organic mixtures: alicyclic and aliphatic carboxylic acids, 455
- Hoefnagel (M.A.), see also: Westrenen (J. van)
- Homeyer (S.T.), Karpinski (Z.) and Sachtler (W.M.H.), Chemisorption and catalysis of zeolite-entrapped palladium, 81
- Hoogerhout (P.), see: Elie (C.J.J.)
- Jansen (F.J.H.M.), see: Berg (E.M.M. van den)
- Jeandrau (J.-P.), see: Gramain (J.-P.)
- Jokela (R.), see: Lounasmaa (M.)
- Jonker (S.A.), Verhoeven (J.W.), Reiss (C.A.), Goubitz (K.) and Heijdenrijk (D.), Cation complexation with functionalized 9-arylacridinium ions. Part II: conformational and spectral response upon metal-ion complexation, 154
- Kaats-Richters (V.E.M.), see: Smeets (J.W.H.)
- Kanter (F.J.J. de), see: Louw (J. van der)
- Kaptein (B.), Kellogg (R.M.) and Bolhuis (F. van), Synthesis, molecular structure, and complexation of 1,4-dihydropyridines containing ligands for intramolecular complexation of metal electrophiles, 388
- Kapteijn (F.), see: Stegenga (S.)
- Karpinski (Z.), see: Homeijer (S.T.)
- Katritzky (A.R.), Rachwal (B.) and Rachwal (S.), Synthesis and NMR-spectral characterization of *N,N*-dialkyl-3-nitroanilines, *N,N*-dialkyl-1,3-benzene-diamines and their acyl derivatives, 377
- Kellogg (R.M.), see: Broos (J.)
- , see also: Doren (H.A. van)
- , see also: Ebens (R.)
- , see also: Kaptein (B.)
- , see also: Moorlag (H.)
- Kerk-van Hoof (A. van der), see: Aalten (H.L.)
- Kieboom (A.P.G.), see: Foppen (M.-A.E.)
- , see also: Nijs (M.P. de)
- , see also: Wit (D. de)
- Klein (P.A.M. van der), see: Boons (G.J.P.H.)
- , see also: Zuurmond (H.M.)
- Klumpp (G.W.), see: Louw (J. van der)
- , see also: Schakel (M.)
- Koeberg-Telder (A.) and Cerfontain (H.), Acid-catalyzed transfer sulfonation of anisole using overcrowded polymethylbenzenesulfonic acids, 41
- Koole (L.H.), Olders (E.A.T.A.), Opresnik (M.) and Buck (H.M.), A kinetic study of the alkaline hydrolysis of four-coordinated phosphorus (P^{IV}) compounds. Impact of conformational transmission in the transiently formed five-coordinated (P^{V} -TBP) intermediates on reaction rate and product distribution, 55
- Kooreman (P.A.), see: Broxterman (H.J.G.)
- Koster van Groos (M.J.), see: Siera (J.)
- Koten (G. van), see: Aalten (H.L.)
- , see also: Abbenhuis (H.C.L.)
- , see also: Alsters (P.L.)
- Kraakman (P.A.), Eeken (P.J.K.M.), Wolf (W.H. de), and Bickelhaupt (F.), On the mechanism of formation and fragmentation of [8]paracyclophane in the gas phase, 240
- Kruizinga (W.H.), see: Moorlag (H.)
- Kubicki (M.), see: Boryczka
- Laarhoven (W.H.), see: Cuppen (Th.J.H.M.)
- Lammerink (B.H.M.), see: Verboom (W.)
- Lange (Y.M. de), see: Foppen (M.-A.E.)
- Lefeber (A.W.M.), see: Gebhard (R.)
- Lemaire (J.), see: Gramain (J.-P.)
- Lenthe (J.H. van), see: Boer (D.H.W. den)
- Leusen (F.J.J.), see: Haest (A.D. van der)
- Lie (T.S.), see: Cappon (J.J.)
- , see also: Woudenberg (R.H.)
- Liskamp (R.M.J.), see: Bont (H.B.A. de)
- Lochmann (L.), Fossatelli (M.) and Brandsma (L.), Dimetallation of benzene, 529
- López-Rodríguez (M.), see: Sepúlveda-Arques (J.)
- Lounasmaa (M.) and Jokela (R.), Alkaline decarboxylative cyclization in the preparation of antirrhine analogues, 397
- Louw (J. van der), Baan (J.L. van der), Timmerman (P.), Kanter (F.J.J. de), Bickelhaupt (F.) and Klumpp (G.W.), 2-Alkoxy-3-methylenetetrahydrofurans by addition of 2-(bromozincmethyl)-3,3-dialkoxy-1-propenes to aldehydes and ketones followed by $\text{Pd}(\text{O})$ -catalyzed cyclization, 29
- , see also: Sol (V.M.)
- Lub (J.), Wel (H. van der), Vroonhoven (F.C.B.M. van) and Benninghoven (A.), A static-secondary-ion-mass-spectrometry study of the surfaces of poly(hydroxyalkyl methacrylates) before and after chemical modification, 367
- Lugtenburg (J.), see: Berg (E.M.M. van den)
- , see also: Boere (B.B.)
- , see also: Gebhard (R.)
- , see also: Hempenius (M.A.)
- , see also: Raap (J.)
- Maas (W.P.M.), see: Visser (R.)
- Maat (L.), see: Cappon (J.J.)
- , see also: Foppen (M.-A.E.)
- , see also: Nijs (M.P. de)
- , see also: Wit (D. de)
- , see also: Woudenberg (R.H.)
- Made (A.W. van der), Nolte (R.J.M.) and Drenth (W.), On the mechanism of epoxidation of alkenes with hypochlorite, catalysed by manganese(III), 537
- , see also: Boer (D.H.W. den)
- Marel (G.A. van der), see: Boons (G.J.P.H.)
- , see also: Broxterman (H.J.G.)
- , see also: Elie (C.J.J.)
- , see also: Veeneman (G.H.)
- , see also: Verduyn (R.)
- Maslankiewicz (A.), see: Boryczka (S.)
- Mattioda (G.), see: Hamedi Sangsari (F.H.)
- Meijboom (N.), see: Budzelaar (P.H.M.)
- Meinema (H.A.), see: Timmer (K.)
- Menezo (J.C.), see: Ghazi (M.)
- Mier (G.P.M. van), see: Abbenhuis (H.C.L.)
- Montanari (F.), see: Banfi (S.)
- Moorlag (H.), Kruizinga (W.H.) and Kellogg (R.M.), (*S*)-2-Chloropropanoyl chloride. A convenient reagent for the determination of the enantiomeric composition of α -substituted α -hydroxy acids, 479
- Moulijn (J.A.), see: Stegenga (S.)
- Mulder (P.), see: Sol (V.M.)
- Mulder (P.P.J.), see: Boere (B.B.)
- Muntendam (H.J.), see: Elie (C.J.J.)
- Navaratnam (S.), see: Feiters (M.C.)
- Nibbering (N.M.M.), see: Visser (R.)
- Nieuwenhuys (B.E.), see: Siera (J.)
- Nijs (M.P. de), Maat (L.) and Kieboom (A.P.G.), Two-step chemo-enzymatic synthesis of octyl 6-*O*-acyl- α -D-glucopyranoside surfactants from glucose, 429
- Nolte (R.J.M.), see: Made (A.W. van der)
- , see also: Sielcken (O.E.)
- , see also: Smeets (J.W.H.)
- Nolting (H.-F.), see: Feiters (M.C.)
- Okunowski (J.K.), Dam (H.E. van) and Bekkum (H. van), pH-Dependence in the $\text{Cu}(\text{I})$ -mediated oxidation of toluene with oxygen or hydrogen peroxide, 103
- Olders (E.A.T.A.), see: Koole (L.H.)
- Opresnik (M.), see: Koole (L.H.)
- Pandit (U.K.), see: Vega (E.)
- Pérez Afonso (R.), see: Sepúlveda-Arques (J.)
- Peters (J.A.), see: Westrenen (J. van)
- Pfeffer (M.), Reaction of cyclopalladated compounds and alkynes: new pathways for organic synthesis?, 567
- Pinna (F.), see: Strukul (G.)
- Pol (J.F. van der), Zwikker (J.W.), Warman (J.M.) and Haas (M.P. de), Synthesis and transport properties of rigid poly(octasubstituted phthalocyaninosiloxanes), 208
- , see also: Walree (C.A. van)
- Putten (A. van der), see: Elzing (A.)
- Quici (S.), see: Banfi (S.)
- Raap (J.), Wielen (C.M. van der) and Lugtenburg (J.), Enantioselective syntheses of isotopically labelled α -amino acids. Preparation of (ϵ - ^{13}C)-L- α -aminoadipic acid and five isotopomers of L-lysine with ^{13}C , ^{15}N and ^2H in the δ - and ϵ -positions, 277
- Rachwal (B.), see: Katritzky (A.R.)
- Rachwal (S.), see: Katritzky (A.R.)
- Rantwijk (F. van), see: Foppen (M.-A.E.)
- , see also: Wit (D. de)
- Reedijk (J.), see: Tullemans (A.H.J.)
- , see also: Viersen (F.J.)
- Reinhoudt (D.N.), see: Sudhölter (E.J.R.)
- , see also: Veggel (F.C.J.M. van)
- , see also: Verboom (W.)
- Reiss (C.A.), see: Jonker (S.A.)
- Remuson (R.), see: Gramain (J.-P.)

- Rewinkel (J.B.M.) and Zwanenburg (B.), The cycloaddition of α -oxo sulfines and 2-trimethylsilyloxy-1,3-butadienes, 190
- Rexwinkel (R.), see: Stunnenberg (F.)
- Roelen (H.C.P.F.), see: Broxterman (H.J.G.)
- Romero Arbiol (E.), see: Sepúlveda-Arques (J.)
- Sachtler (W.M.H.), see: Ghazi (M.)
- , see also: Homeijer (S.T.)
- Santen (R.A. van), On Shustorovich's bond-order conservation method as applied to chemisorption, 59
- Savelli (G.), see: Buntun (C.A.)
- Schakel (M.), Aarnts (M.P.) and Klumpp (G.W.), The lithiation of N,N,N',N'',N'''-pentamethyldiethylenetriamine (PMDTA), 305
- Scheeren (J.W.), see: Aben (R.W.)
- Schenk (J.), see: Heide (E. van der)
- Schipper (P.E.), The weak-overlap bond: an SGF (Simplified Group Function) analysis, 1
- Schmidt (M.), see: Strukul (G.)
- Schoemaker (H.E.), On the chemistry of lignin biodegradation, 255
- Scholten (J.J.F.), see: Heide (E. van der)
- Schonk (R.M.), see: Bakker (B.H.)
- Schoonman (J.), see: Sielcken (O.E.)
- Sepúlveda-Arques (J.), Romero Arbiol (E.), González Rosende (M.E.), López-Rodríguez (M.) and Pérez Afonso (R.), Unprecedented ring cleavage in the reaction of 1-methyl-3-phenacyl benzimidazolium ylide with diethyl azodicarboxylate, 410
- Sevin (A.), see: Stunnenberg (F.)
- Si (V.C.), see: Buntun (C.A.)
- Sielcken (O.E.), Nolte (R.J.M.) and Schoonman (J.), Iodine-doped 'crowned' phthalocyanines, 230
- , Drenth (W.) and Nolte (R.J.M.), ¹³Crown-ether-substituted phthalocyanines. Control of supramolecular organization by monovalent and divalent metal salts, 425
- Siera (J.), Koster van Groos (M.J.) and Nieuwenhuys (B.E.), The effect of alloying on the adsorption of nitric oxide on platinum and rhodium(100). A TDS study using a Pt-Rh(100)-alloy single crystal surface, 127
- Skowronska-Ptasinska (M.), see: Sudhölter (E.J.R.)
- Sluis (P. van der), see: Abbenhuis (H.C.L.)
- Smeets (J.W.H.), Visser (H.C.), Kaats-Richters (V.E.M.) and Nolte (R.J.M.), Basket-shaped hosts with semi-flexible handles, 147
- Smid (J.), see: Delaviz (Y.)
- Soest (R. van), see: Stegenga (S.)
- Sol (V.M.), Louw (R.) and Mulder (P.), Gas-phase oxygenation of benzene derivatives around 300 K with O(³P) atoms produced by microwave discharge of N₂O. Part 2. Kinetic H/D isotope effects, 346
- , Mulder (P.) and Louw (R.), Gas-phase reactions of benzene and derivatives triggered by hydrazine/ozone; hydroxylation vs. degradation, 577
- Spek (A.L.), see: Abbenhuis (H.C.L.)
- Stam (C.H.), see: Boer (J.S.A.M. de)
- Stegenga (S.), Dekker (N.J.J.), Soest (R. van), Kapteijn (F.) and Moulijn (J.A.), Hysteresis during CO-oxidation activity measurements on carbon-supported copper/chromium catalysts, 112
- Stein (F.), see: Tinnemans (A.H.A.)
- Stellbrink (H.), see: Wulff (G.)
- Strukul (G.), Zanardo (A.), Pinna (F.), Schmidt (M.) and Goor (G.), Study of the promotion effect of inorganic oxides on Pt catalysts for the epoxidation of 1-octene with hydrogen peroxide, 107
- Stunnenberg (F.), Rexwinkel (R.), Cerfontain (H.) and Sevin (A.), Photochemical behaviour of cyclic *s-cis* α -oxo oxime ethers. *Ab-initio* investigation on ethanedial monooxime as model compound, 502
- , see also: Buys (T.S.V.)
- Sudhölter (E.J.R.), Wal (P.D. van der), Skowronska-Ptasinska (M.), Berg (A.; van den), Bergveld (P.) and Reinhoudt (D.N.), Transduction of host-guest complexation into electronic signals: favoured complexation of potassium ions by synthetic macrocyclic polyethers using membrane-modified, ion-sensitive field-effect transistors (ISFETs), 222
- Teuben (J.H.), see: Heeres (H.J.)
- Teunissen (H.T.), see: Alsters (P.L.)
- Thewissen (D.H.M.W.), see: Timmer (K.)
- Timmer (K.), Thewissen (D.H.M.W.), Meinema (H.A.) and Bulten (E.A.), Highly active heterogeneous rhodium catalysts for the liquid-phase hydrogenation of aromatic and other unsaturated compounds under mild conditions, 87
- Timmerman (P.), see: Louw (J. van der)
- Tinnemans (A.H.A.), Budding (H.A.), Stein (F.) and Venekamp (J.C.), Polyamides and polyester containing 2,4:3,5-di-*O*-methylene-L-idaroyl residues, 181
- Tullemans (A.H.J.), Bouwman (E.), Graaff (R.A.G. de), Driessen (W.L.) and Reedijk (J.), Dioxygen uptake and catalytic activity of some monomeric copper(II) compounds containing an N,S donor ligand. The X-ray structure of bis[5-methyl-4-(ethylthiomethyl) imidazole]bis(tetrafluoroborate) copper(II), 70
- Veeneman (G.H.), Marel (G.A. van der), Elst (H. van den) and Boom (J.H. van), Synthesis of oligodeoxynucleotides containing thymidines linked *via* an internucleosidic-(3'-5')-methylene bond, 449
- , see: Zuurmond (H.M.)
- Vega (E.), Waard (E.R. de) and Pandit (U.K.), Reduction of 1-(5-uracyl-methyl)pyridinium salts by thiols to thymine derivatives. A model of the thymidylate synthase reaction, 131
- Veggel (F.C.J.M. van), Bos (M.), Verboom (W.) and Reinhoudt (D.N.), Electrochemical reduction of benzyl chloride catalyzed by a hetero-dinuclear complex, 515
- Vekemans (J.A.J.M.), see: Beijer (N.A.)
- Veldink (G.A.), see: Feiters (M.C.)
- Venekamp (J.C.), see: Tinnemans (A.H.A.)
- Verboom (C.), see: Verboom (W.)
- Verboom (W.) and Reinhoudt (D.N.), 'Tert-amino effect' in heterocyclic synthesis. Ring closure reactions of *N,N*-dialkyl-1,3-dien-1-amines, 311
- , Verboom (C.), Eissink (I.M.), Lammerink (B.H.M.) and Reinhoudt (D.N.), 'Tert-amino effect' in heterocyclic synthesis. Synthesis of thieno[3,2-*e*]-indolizines and thieno[2,3-*c*]quinolizines, 481
- , see also: Veggel (F.C.J.M. van)
- Verduyn (R.), Elie (C.J.J.), Dreef (C.E.), Marel (G.A. van der) and Boom (J.H. van), Stereospecific synthesis of partially protected 2-azido-2-deoxy-D-glucosyl D-*myo*-inositol: precursor of a potential insulin mimetic and membrane protein anchoring site, 591
- Verhoeven (J.W.), see: Jonker (S.A.)
- Viersen (F.J.), Challa (G.) and Reedijk (J.), Mechanistic studies of the oxidative-coupling polymerization of 2,6-dimethylphenol. Part II. Specificity of the reaction and formation of diphenoquinone, 97
- Visscher (W.), see: Elzing (A.)
- Visser (H.C.), see: Smeets (J.W.H.)
- Visser (R.), Maas (W.P.M.) and Nibbering (N.M.M.), Collision-induced dissociation reactions of *o*-*m*- and *p*-methoxyphenyl anions in the gas phase, 248
- Vliegthart (J.F.G.), see: Feiters (M.C.)
- Vrieze (K.), see: Aalten (H.L.)
- Vroonhoven (F.C.B.M. van), see: Lub (J.)
- Waard (R. de), see: Vega (E.)
- Wal (P.D. van der), see: Sudhölter (E.J.R.)
- Walree (C.A. van), Pol (J.F. van der) and Zwicker (J.W.), A liquid-crystalline poly(iminoethylene) with cholesterol-containing pendant groups, 561
- Wel (H. van der), see: Lub (J.)
- Wepster (B.M.), see: Hoefnagel (A.J.)
- Werken (G. van de), see: Elie (C.J.J.)
- Westrenen (J. van), Haveren (J. van), Alblas (F.J.), Hoefnagel (M.A.), Peters (J.A.) and Bekkum (H. van), The synthesis of polyhydroxycarboxylates. Part 6. *I*-Alkylation of amino compounds by a Michael-type addition with maleate, 474
- Wielen (C.M. van der), see: Raap (J.)
- Wit (D. de), Rantwijk (F. van), Maat (L.) and Kieboom (A.P.G.), The effect of pH and temperature on the periodate oxidation of sucrose, 518
- Wolf (W.H. de), see: Kraakman (P.A.)
- Woudenberg (R.H.), Lie (T.S.) and Maat (L.), Rigid etheno-bridged metopon analogues from Diels-Alder reaction of 5-methylthebaine. (Chemistry of opium alkaloids, Part XXXII), 353
- Wulff (G.) and Stellbrink (H.), On the chemistry of binding sites VII. Enantioselective binding using chiral boronic acids, 216
- Warman (J.M.), see: Pol (J.F. van der)
- Wynberg (H.), see: Doren (H.A. van)
- , see also: Haest (A.D. van der)
- Wyszomirski (M.), see: Strukul (G.)
- Zanardo (A.), see: Strukul (G.)
- Zuurmond (H.M.), Klein (P.A.M. van der), Veeneman (G.H.) and Boom (J.H. van), A convenient iodonium-ion-assisted synthesis of an immunologically active tetrameric $\beta(1 \rightarrow 5)$ -linked D-galactofuranoside from the extracellular polysaccharide of *Aspergillus* and *Penicillium* species, 437
- Zwaans (R.), see: Boer (D.H.W. den)
- Zwanenburg (B.), see: Rewinkel (J.B.M.)
- Zwicker (J.W.), see: Pol (J.F. van der)
- , see also: Walree (C.A. van)

Subject Index

Recl. Trav. Chim. Pays-Bas **109**, 598–602 (1990)

0165–0513/90/12598–05\$1.75

- Ab initio*, see quantum chemistry
Acetaldehyde, carboxylation to pyruvic acid, 359
Acetaldehyde, 2-(hydroxyimino)-, *ab-initio* study of photochemistry, 502
Acetalization, Aldehydes, α -unsaturated, 552; cellulose cross-linked by glyoxal, 419; glyoxal, 15
Acetophenone, from styrene oxidation, 93
Acridinium ions, 9-aryl, complexation, 154
Acrylonitriles, cycloaddition to anisoles, 21
Acyl glucosides, octyl 6-*O*-acyl- α -D-glucopyranosides, 429
Adipic acid, 2-amino-, labeling, 277
Adsorption, dioxygen on metal chelates (review), 31; NO on Pt/Rh alloy, 127; Shustorovich's Bond-Order Conservation, 59
Aldehydes, α -unsaturated, 1-aryl-2,2-dimethyl-1,3-propanediol acetals, 552
Aliphatic acids, dissociation constants, 455
Alkaloids, antirrhine analogs, 397; opium -, Part XXXII: etheno-bridged metopon analogs, 353; opium -, Part XXXIII: etheno-bridged morphinan peptides, 413
Alkenes, hypochlorite oxidation, ^{18}O labeling, 537
2-Alkoxy-3-methylenetetrahydrofurans, from organozinc, 29
Alkylating agent, lithium bromoacetate, 463
2-Alkylidene-1,3-dioxolanes, 399
Alkynes, with cyclopalladium compds. (review), 567
Alloying, on adsorption of NO on Pt/Rh alloy, 127
Allyl anions, phosphino-stabilized -, 303
Allylpotassium, 303
Alternating-current impedance spectroscopy, iodine-doped "crowned" phthalocyanines, 230
Alumina, CO_2 hydrogenation, support for Ni catalyst, 332
Aluminum, $\text{MoO}_3/\text{AlO}_3$ catalyst in propene metathesis, 77
Amicyanin, ^1H NMR, EXAFS (thesis), 490
Amides, photoreducing aryl ketones, 325
Amines, alkylation by maleate, 474; in photochemistry of dihydronaphthalenes, 168; Pt complexes, with sulfur-contg. biomolecules (thesis), 490
Amino acids, alkylation by maleate, 474; hydroxy -, phosphitylation, 27; labeling, 277, 287; sequence in lipoxigenase (review), 133; synthesis (book), 401
tert-Amino effect, see *tert*-amino effect
1-Amino-1-phenylcyclopropane, molecular and crystal structure, 375
2-Aminoadipic acid, labeling, 277
Amphiphiles, liquid crystals (thesis), 310
Anilines, *N,N*-dialkyl-3-nitro-, 337; 3-nitro- for *N,N*-dialkylbenzenediamines, 337
Anisoles, cycloaddition to acrylonitriles, 21; sulfonation, 41
Anisyl anions, dissociation, 248
Anthracene, for cyclopent[*h*]aceanthrylene, 463
Antipode, see chirality
Antirrhine, analogs, 397
Aromas, thermal generation (book), 401
(Arylsulfonyl)methyl perchlorates, deprotonation, 204
Asymmetry, see chirality
Aza-crown ether, 9-arylacridinium substituent, 154; in benzyl chloride, electroreduction, 515
2-Azido-2-deoxy-D-glucosyl, D-*myo*-inositol, 591
Azodicarboxylate, in imidazole ring cleavage, 410
Barium, aza-crown ether in benzyl chloride, electroreduction, 515; crown ether phthalocyanine complex, 425; in metallomacrocycles (thesis), 402
Basicity, HMPA, 204
Basket-shaped molecules, 147
Benzaldehyde, from styrene oxidation, 93
Benzene, dimetallation, 529; gas-phase reactions by hydrazine/ozone, 577
1,2-Benzenediamine, crystal structure, 410
1,3-Benzenediamines, dialkyl-, 337
Benzenesulfonic acids, polymethyl-, anisole sulfonation, 41
Benzimidazolium ylide, imidazole ring cleavage, 410
Benzofuran, 3-(1-pyrrolydyl)-, 481
Benzoin, reduction by NADH model, 434
Benzophenone, photoreduction by amides and lactams, 325
Benzotriazole, for *N,N*-dialkylbenzenediamines, 337
Benzyl chloride, electrochemical reduction, 515
Benzylamine, *N,N*-dimethyl, Pd complex, oxygenation, 487
2,2'-Bioxolanes-1,3, glyoxal acetalization, 15
Binding sites, phenylboronic acids, 216
Bioconversion, to labeled tryptophan, 287
Biodegradation, lignin, 255
Biomimetic chemistry, thymine, 131
Bismuth trihalides, complexes with carbonyl compounds, 176
BOC, Shustorovich's Bond-Order Conservation, 59
Bolaform surfactants, 2,4-dinitrophenyl phosphate hydrolysis catalysis, 64
Bond-Order Conservation of Shustorovich, in chemisorption, 59
Book reviews, boranes and metalboranes, 594; chitin, 365; enones, 308; heterocyclic chemistry, 309; logic of chemical synthesis, 364; nitration, 594; Patai's guide to functional groups, 308; photoinduced electron transfer, 26; physical-property prediction in org. chem., 365; polysaccharides, 307; radiation curing of polymers, 452; Raman/IR, 452; stereoselective synthesis of natural products, 364; structure and reactivity, 309; supercritical fluids, 566; synthesis of optically active α -amino acids, 401; thermal generation of aromas, 401
Boranes, (book), 594
Boronic acids, phenyl-, binding sites, 216
2-[(Bromozinc)methyl]-3,3-dialkoxypropenes, with aldehydes and ketones, 29
1,3-Butadienes, 2-silyloxy-, cycloaddition to α -oxo sulfines, 190
***tert*-Butyl hydroperoxide**, with dimethylbenzylamine Pd complex, 487
Butyllithium, for dimetallation of benzene, 529; trimethoxybenzene, methoxy displacement, 443
Cage molecules, 147
Calix[4]arene, macrocyclic polyether, 222
Capsular polysaccharide, 467
Carbohydrates, azido-glucosyl-inositol, 591; capsular polysaccharide, 467; cellulose cross-linked by glyoxal, 419; D-galactofuranoside tetramer, 437; liquid crystals (thesis), 310; 2,4:3,5-di-*O*-methylene-L-idaroyl-contg. polymers, 181; octulosonic acid (KDO), 273; octyl 6-*O*-acyl- α -D-glucopyranosides, 429; polysaccharides (book), 307; sucrose periodate oxidation, 518; uridine 5'-diphosphate glucoses and mannoses, 583
Carbon dioxide, hydrogenation by Ni on alumina, 332
Carbon monoxide, hydrogenation by Ni on alumina, 332
Carbonyl compounds, bismuth trihalide complex, 176
Carboxylation, acetaldehyde to pyruvic acid, 359
Carboxylic acids, dissociation constants, 455
Carotenes, labeling, 378
Catalysis, benzyl chloride, electroreduction, 515; CO_2 hydrogenation by Ni on alumina, 332; by Cu(I) in halobenzoic acid with β -dicarbonyl, Hurlley reaction, 46; Cu(II) imidazole BF_4 complexes in oxidation, 70; Cu(II) in oxidative polymerization of 2,6-dimethylphenol, 97; HMPA in deprotonation of (arylsulfonyl)methyl perchlorates, 204; hydrolysis by single-chain, twin-tailed, bolaform surfactants, 64; lanthanum in amine alkylation by maleate, 474; lignin peroxidase, 255; Mn(III) porphyrins in alkene hypochlorite oxidation, ^{18}O labeling, 537; $\text{MoO}_3/\text{AlO}_3$ in propene metathesis, 77; 1-octene epoxidation by Pt, 107; Pd, zeolite-entrapped, in neopentane conversion, 81; porphyrins in HOCl/ClO epoxidation, 117; Rh in hydrogenation, 87; toluene oxidation by Cu(I), 103; vanadium in styrene oxidation, 93
Cationic surfactants, 2,4-dinitrophenyl phosphate hydrolysis catalysis, 64
Cellulose, cross-linked by glyoxal, 419
Cesium, crown ether phthalocyanine complex, 425; in metallomacrocycles (thesis), 402
Chelation, see complexation
Chemical synthesis, logic, (book), 364
Chemisorption, Pd, zeolite-entrapped, 81; Shustorovich's Bond-Order Conservation, 59
Chirality, capsular polysaccharide, spacer-containing fragment, 467; cyclic phosphates, 523; 2-enal 1-aryl-2,2-dimethyl-1,3-propanediol acetals, 552; α -hydroxy acids, 479; phenylboronic acids, 216; tantalum(V)azacyclopropane complex, 361
Chitin, (book), 365
Chlorobenzene, gas-phase reactions by hydrazine/ozone, 577
(*S*)-2-Chloropropanoyl chloride, for enantiomeric composition of α -hydroxy acids, 479
Cholesterol, in poly(iminomethylene), liquid crystals, 561
Chromatography, phenylboronic acids, 216
Chromium, carbon monoxide oxidation, catalysis, 112
Chromoionophoric effect, in 9-arylacridinium complexes, 154
Chromophores, aryl ketones, 325
***trans*-Cinnamaldehyde**, from styrene oxidation, 93
***Cis-trans* isomerization**, see isomerization
Cobalt(III), μ -cyano(octaethylporphyrinato)-, 235
Collision-induced dissociation, methoxyphenyl anions, 248
Columnar aggregates, based on phthalocyanine (thesis), 453
Complexation, adsorbing dioxygen (review), 31; with 9-arylacridinium ions, 154; with basket-shaped molecules, 147; by crown ether phthalocyanines, 425; by 1,4-dihydropyridines contg. complexing ligands, 388; macrocyclic polyethers + K^+ , 222
Computation, weak-overlap bond (review), 1
Conductivity, crown ether phthalocyanines, 425; iodine-doped "crowned" phthalocyanines, 230; phthalocyaninato polysiloxanes, 208
Conformation, 9-arylacridinium complexes, 154; 2,4:3,5-di-*O*-methylene-L-idaric and -D-glucaric acid, 181; morphinan peptides, 413; 4-coordinated P compounds, hydrolysis, 55
Coordination, Mn(III)-porphyrins, 117; 4-coordinated P compounds, hydrolysis, 55; tantalum(V) alkylidene complex, 446
Copper, carbon monoxide oxidation, catalysis, 112; Cu(II) imidazole BF_4 complexes, oxidation catalysis, 70; 2-halobenzoic acid with β -dicarbonyl, catalysis of Hurlley reaction by, 46; imidazole-thioether complex (thesis), 402; oxidative polymerization of 2,6-dimethylphenol, catalysis by Cu(II), 97; toluene oxidation, catalysis by Cu(I), 103
Corticosteroids, (thesis), 402
Critical micelle concentration (CMC), octyl 6-*O*-acyl- α -D-glucopyranosides, 429
Cross-linking, cellulose, 419
Crown ethers, see also aza-crown ethers; 9-arylacridinium substituent, 154; in benzyl chloride, electroreduction, 515; complexing potassium ions, 222; phthalocyanines, 425

- Crystal structure**, 9-arylacridinium complexes, 154; 1,2-benzenediamine deriv., 410; Cu(II) imidazole BF₄ complex, 70; 1,4-dihydropyridines contg. complexing ligands, 388; 3,4'-diquinolyl sulfide, 509; metallomacrocycles (thesis), 402; 1-phenylcyclopropanamine, 375; tantalum(V)azacyclopropane complex, 361; tantalum(V) alkylidene complex, 446
- μ -Cyano(octaethylporphyrinato)cobalt(III)**, 235
- Cyanoalkyl cyclization**, in photochemistry of α -oxo oximes, 491
- (Cyanomethyl)phosphonate**, for demethylretinals, deuteriated, 160
- Cyclic phosphates**, resolution by ephedrine, 523
- Cyclic voltammetry**, alkene hypochlorite oxidation, ¹⁸O labeling, 537; in benzyl chloride, electroreduction, 515
- Cyclization**, see ring closure
- Cycloaddition**, see ring closure
- Cyclohexanecarboxylic and -acetic acids**, dissociation constants, 455
- Cyclopalladated compds.**, with alkynes (review), 567; *N,N*-dimethylbenzylamine complex, oxygenation, 487
- Cyclopent[hi]aceanthrylene**, 463
- Cyclopentadienyl**, In(I) and Tl(I), metal-metal interaction, 187; (pentamethylcyclopentadienyl)lanthanum aryloxides, 226
- Cyclopentanone azine**, in photochemistry of α -oxo oximes, 491
- Cyclophane**, [8]para-, 240
- Cyclopropanamine, 1-phenyl-**, molecular and crystal structure, 375
- Cyclopropanation**, 2-enal 1-aryl-2,2-dimethyl-1,3-propanediol acetals, 552
- Cytochrome C-550**, ¹H NMR, EXAFS (thesis), 490
- Cytochrome P-450**, alkene hypochlorite oxidation, model, 537
- Dative spectroscopic shifts**, weak-overlap bond (review), 1
- Demetallation**, cyclopalladium compds. (review), 567
- Demethylation**, etheno-bridged analogs, 353
- Demethylretinals**, deuteriated, 160
- Deoxynucleotides, oligo-**, contg. thymidine, 449
- Deprotonation**, (arylsulfonyl)methyl perchlorates, 204; dihydronaphthalenes, 168
- Deuteration**, (arylsulfonyl)methyl perchlorates, 204; benzene derivs., oxygenation by O(³P), 346; demethylretinals, 160
- Dialdehyde**, from sucrose periodate oxidation, 518
- Diastereoisomer**, see stereochemistry
- Diazomethane**, MoO₃/AlO₃ catalyst, effect in propene metathesis, 77
- Dibenzosuberone**, photoreduction by amides and lactams, 325
- β -Dicarbonyls**, with 2-halobenzoic acids + Cu(I), Hurtley reaction, 46
- dicyclopenta[de,kl]anthracene**, cyclopent[hi]aceanthrylene, 463
- Diels-Alder reaction**, etheno-bridged metopon analogs, 353
- 1,3-Dien-1-amines, *N,N*-dialkyl-**, ring closure (review), 311
- Differential Scanning Calorimetry**, see DSC
- Dihydronaphthalenes**, photochemistry, 168
- 1,4-Dihydropyridines**, contg. complexing ligands, 388
- Diketone monooximes**, photochemistry, 491
- Dimetallation**, benzene, 529
- N,N*-Dimethylbenzylamine**, Pd complex, oxygenation, 487
- 2,6-Dimethylphenol**, oxidative polymerization, 97
- Dinitrogen oxide**, microwave discharge \rightarrow O(³P), oxygenation of benzene derivs., 346
- 2,4-Dinitrophenyl phosphate**, hydrolysis catalysis, 64
- Dinucleotide**, see nucleotide
- 1,4-Dioxane-2,3-dioles**, glyoxal acetalization, 15
- 1,3-Dioxanes**, from 1-aryl-2,2-dimethyl-1,3-propanediols, 552
- [1,3]dioxino[5,4-*d*]-1,3-dioxin ring**, in 2,4:3,5-di-*O*-methylene-L-idaric and -D-glucaric acid, 181
- 1,3-Dioxolanes, 2-alkylidene-**, 399
- Dioxygen**, adsorption on chelates (review), 31
- Dioxygenase**, non-heme, Fe X-ray spectroscopy (review), 133
- Dipeptides**, see peptides
- Diphenoquinone**, from Cu(II)-imidazole-BF₄-catalyzed oxidation, 70; from oxidative polymerization, 97
- Discotic metaphase**, phthalocyaninato polysiloxanes, 208
- Disproportionation**, (pentamethylcyclopentadienyl)lanthanum aryloxides, 226
- Dissociation**, carboxylic acids, - constants, 455; methoxyphenyl anions, 248; Shustorovich's Bond-Order Conservation, 59
- DNA-platinum interaction**, (thesis), 310
- Doping**, "crowned" phthalocyanines with iodine, 230
- Drenth, Prof. Wiendelt**, Recueil dedicated to, 31, 133
- DSC (Differential Scanning Calorimetry)**, cyclic phosphates resolved, 523; liquid crystals of 1,2-propanediols, 197; 2,4:3,5-di-*O*-methylene-L-idaroyl-contg. polymers, 181; poly(iminomethylene) contg. cholesterol, 561
- DTA (Differential Thermal Analysis)**, see TGA
- Dutch Ph.D. theses**, see theses
- E-Z* isomerization**, see isomerization
- Electrical conductivity**, see conductivity
- Electrochemical reduction**, benzyl chloride, 515
- Electrochemistry**, metallomacrocycles (thesis), 402
- Electron Spin Resonance**, see ESR
- Electron transfer**, photoinduced - (book), 26
- Electronic absorption**, see UV
- Electronic spectra**, see UV
- 2-Enals**, 1-aryl-2,2-dimethyl-1,3-propanediol acetals, 552
- Enamines**, pseudo-- in *N,N*-dialkyl-1,3-dien-1-amines ring closure (review), 311
- Enantiomeric composition**, α -hydroxy acids, 479
- Enantioselective binding**, phenylboronic acids, 216
- Enantioselective synthesis**, labeled 2-aminoadipic acid and lysine, 277
- Energy migration**, phthalocyaninato polysiloxanes, 208
- Enkephalin**, for morphinan peptides, 413
- Enones**, (book), 308
- Enzymatic decarboxylation, reversal**, acetaldehyde, 359
- Enzymes**, for labeled tryptophan, 287; lignin biodegradation, 255; modified papain, 299; for octyl 6-*O*-acyl- α -D-glucopyranosides, 429; thymidilate synthase, 131
- Ephedrine**, for cyclic phosphates resolution, 523
- Epoxidation**, by HOCl/ClO + Mn(III)-porphyrins, 117; by MnO-porphyrin chloride, 123; 1-octene, Pt-catalyzed, 107
- ESR (Electron Spin Resonance)**, metallomacrocycles (thesis), 402
- Ethanamine**, 2,2'-(methylimino)bis-, lithiation, 305
- Ethanedial monooxime**, *ab-initio* study of photochemistry, 502
- 1,2-Ethandiol, 1,2-diphenyl-**, benzoin reduction by NADH model, 434
- 6 α ,14 α -Ethenoisomorphinan**, 353
- Ethenomorphinan**, peptides, 413
- Europium**, organic -, X-ray-excited luminescence, 172
- EXAFS**, amicyanin and cytochrome C550 (thesis), 490; Fe in lipoxygenase (review), 133
- Excess Mixed Anhydride (EMA) method**, morphinan peptides, 413
- Extended X-Ray Absorption Fine Structure**, see EXAFS
- FAB (Fast Atomic Bombardment) mass spectra**, see MS
- Fast sound**, in binary gas mixtures (thesis), 453
- Fixed spin**, weak-overlap bond (review), 1
- Flash-Vacuum Pyrolysis**, see FVP
- Flash-Vacuum Thermolysis**, see FVP
- Force-field calculation**, 2,4:3,5-di-*O*-methylene-L-idaric and -D-glucaric acid, 181
- Formulae**, adsorbing dioxygen (review), 31; adsorption energies, 59; weak-overlap bond (review), 1
- Free radicals**, see radicals
- Fructose**, ring cleavage in sucrose periodate oxidation, 518
- Functional groups**, Patai's guide (book), 308
- FVP (Flash-Vacuum Pyrolysis)**, [8]paracyclophane, 240
- Gadolinium**, organic -, X-ray-excited luminescence, 172
- D-Galactofuranoside tetramer**, from polysaccharide, 437
- Gas mixtures**, partial structure factors and fast sound (thesis), 453
- Gas-phase reactions**, benzene by hydrazine/ozone, 577; oxygenation of benzenes by O(³P), 346
- GC-MS**, 2-halobenzoic acid with β -dicarbonyl + Cu(I), Hurtley reaction, 46
- D-Glucaric acid, 2,4:3,5-di-*O*-methylene-**, force-field calculation, 181
- D-Gluconic acid**, for 2,4:3,5-di-*O*-methylene-L-idaroyl-contg. polymers, 181
- α -D-Glucopyranoside, 6-*O*-acyl-**, 429
- Glucose**, ring cleavage in sucrose periodate oxidation, 518; uridine 5'-diphosphate analogs, 583
- Glycol, 1,2-diphenyl-**, benzoin reduction by NADH model, 434
- Glycosidation**, for azido-glucosyl-inositol, 591; D-galactofuranoside tetramer, 437
- Glycosyltransferase**, for uridine 5'-diphosphate glucoses and mannoses, 583
- Glyoxal**, acetalization in cellulose cross-linking, 419; acetalization, 15
- Ground-state dative energy**, weak-overlap bond (review), 1
- Group-function computation**, weak-overlap bond (review), 1
- Haem-**, see hem-
- 2-Halobenzoic acids**, with β -dicarbonyls + Cu(I), Hurtley reaction, 46
- Handedness**, see chirality
- Hantzsch esters**, contg. complexing ligands, 388
- non-Heme iron dioxygenase**, Fe X-ray spectroscopy (review), 133
- Hemiacetalization**, cellulose cross-linked by glyoxal, 419
- Heterocyclic chemistry**, (book), 309; from cyclopalladium compds. (review), 567
- Heterogeneous catalysis**, see catalysis
- Hexamethylphosphoric amide**, see HMPA
- histidine-containing oligopeptides**, cleaving esters (thesis), 310
- HMPA**, proton tunneling and basicity, 204
- Horner-Emmons reaction**, for demethylretinals, deuteriated, 160
- Host-guest system**, basket-shaped molecules, 147; macrocyclic polyethers + K⁺, 222
- Hurtley reaction**, 2-halobenzoic acid with β -dicarbonyl + Cu(I), 46
- Hydrazine**, in benzene gas-phase reactions, 577
- Hydrogen peroxide**, 1-octene epoxidation, 107; toluene oxidation, 103
- Hydrogen shift**, 1,5 - in thieno[3,2-*e*]indolizines and -[2,3-*c*]quinolizines, 481; 1,6 - in *N,N*-dialkyl-1,3-dien-1-amines ring closure (review), 311
- Hydrogenation**, catalyzed by Rh, 87
- Hydrolysis**, 2,4-dinitrophenyl phosphate, catalysis, 64; 4-coordinated P compounds, 55
- Hydrophobic constants**, carboxylic acids, 455
- Hydroxy amino acids**, phosphorylation, 27
- Hydroxyl radicals**, in benzene gas-phase reactions, 577; in toluene oxidation by Cu(I), 103
- Hypochlorite epoxidation**, + Mn(III)-porphyrins, 117
- Hypochlorite oxidation**, alkenes, ¹⁸O labeling, 537
- L-Idaric acid, 2,4:3,5-di-*O*-methylene-**, force-field calculation, 181
- Imidazoles**, Cu(II)/BF₄ complex, oxidation catalysis, 70; in 1,4-dihydropyridines, tautomerization, 388; thioether Cu complex (thesis), 402
- Imino)bis(ethanamine), 2,2'-(methyl-**, lithiation, 305
- Iminomethylene**, poly-, liquid-crystalline - contg. cholesterol, 561
- Iminyl radicals**, in photochemistry of α -oxo oximes, 491
- 1,2-Indanedione monooximes**, photochemistry, 531
- 1-Indanones, 2-(methoxyimino)-**, photochemistry, 531
- Indium(I) cyclopentadienyl**, metal-metal interaction, 187
- Indolol**, for labeled tryptophan, 287
- Infra-red**, see IR
- Inositol**, azido-glucosyl -, 591
- Iodonium**, for D-galactofuranoside tetramer, 437
- N*-Iodosuccinimide**, for D-galactofuranoside tetramer, 437
- Ion structure**, methoxyphenyl anions, 248
- Ion-Sensitive Field-Effect Transistor**, see ISFET
- IR (Infra-Red)**, (book), 452; BiCl₃ complex with CO compounds, 176; μ -cyano(octaethylporphyrinato)cobalt(III), 235
- Iron**, in lipoxygenase, X-ray spectroscopy (review), 133
- Irradiation**, see photochemistry
- ISFET (Ion-Sensitive Field-Effect Transistor)**, macrocyclic polyethers + K⁺, 222
- Isomerization, *E-Z* - in α -oxo oximes**, photochemistry, 491, 502, 531
- Isotope effect**, N₂O \rightarrow O(³P), oxygenation of benzene derivs., 346
- Isotopic effect**, (arylsulfonyl)methyl perchlorates, 204
- Isotopomers**, see labeling
- KDO (octulosonic acid)**, 273
- Ketene acetals**, 2-alkylidene-1,3-dioxolanes, 399

- Ketones, aryl** -, photoreduction by amides and lactams, 325
- Kinetics**, alkene hypochlorite oxidation, ^{18}O labeling, 537; amine alkylation by maleate, 474; aryl ketones, reduction, 325; (arylsulfonyl)methyl perchlorates, deprotonation, 204; benzoin reduction by NADH model, 434; Cu(II) imidazole BF_4 complexes in oxidation catalysis, 70; 2,4-dinitrophenyl phosphate, hydrolysis catalysis, 64; epoxidation by $\text{HOCl}/\text{ClO}^- + \text{Mn(III)-porphyrins}$, 117; 2-(methoxyimino)-1-indanone photochemistry, 531; $\text{N}_2\text{O} \rightarrow \text{O}(^3\text{P})$, oxygenation of benzene derivs., 346; neopentane conversion, catalyzed by Pd, 81; 4-coordinated P compounds, hydrolysis, 55; (pentamethylcyclopentadienyl)lanthanum aryloxides, 226; phenylboronic acids, binding, 216; poly(hydroxyalkyl methacrylates) + propionyl chloride, 367; propene metathesis, 77; styrene oxidation, 93; sucrose periodate oxidation, 518
- Labeling**, ^{18}O - in alkene hypochlorite oxidation, 537; α -amino acids, 277; benzene derivs., oxygenation by $\text{O}(^3\text{P})$, 346; demethylretinals, deuteriated, 160; methoxyphenyl anions, 248; [8]paracyclophane labeled with ^{13}C , 240; spheroidene, 378; tryptophan, 287
- Lactams**, photoreducing aryl ketones, 325
- Lanthanum**, catalyst in amine alkylation by maleate, 474; (pentamethylcyclopentadienyl)- aryloxides, 226
- Light scattering spectroscopy**, partial structure factors and fast sound in gases (thesis), 453
- Lignin**, biodegradation, 255
- Lipases**, for octyl 6-*O*-acyl- α -D-glucopyranosides, 429
- Lipopolysaccharides**, octulosonic acid (KDO), 273
- Lipoxygenase**, Fe X-ray spectroscopy (review), 133
- Liquid crystals**, in amphiphiles (thesis), 310; octyl 6-*O*-octanoyl- α -D-glucopyranosides, 429; phthalocyaninato polysiloxanes, 208; poly(imino-methylene) contg. cholesterol, 561; 1,2-propanediols, 197
- Lithiation**, *N,N,N',N'',N'''*-pentamethyldiethylenetriamine, 305
- Lithium**, see butyllithium, 529
- Lithium bromoacetate**, for anthracene, double alkylation, 463
- Locked**, see rigid
- Logic of chemical synthesis**, (book), 364
- Luminescence**, gadolinium organic compounds, X-ray excited, 172; phthalocyaninato polysiloxanes, 208
- Lytropy**, 1,2-propanediols, 197
- Lysine**, labeling, 277
- Macrocyclic polyethers**, complexing potassium ions, 222
- Macromolecules**, see peptides, polymers, proteins
- Maleate**, in amine alkylation, 474
- Manganese**, Mn(II) peroxidase in lignin biodegradation, 255; Mn(III) porphyrins in hypochlorite epoxidation, 117; Mn(III) porphyrins, catalyst in alkene hypochlorite oxidation, 537; MnO porphyrin chloride, *ab-initio* calculation, 123
- Mannose**, uridine 5'-diphosphate analogs, 583
- Mass spectrometry**, see GC-MS and MS
- Mathematical equations**, see formulae
- Mechanism**, alkene hypochlorite oxidation, ^{18}O labeling, 537; anisole sulfonation, 41; cellulose cross-linking, 419; 2-halobenzoic acid with β -dicarbonyl + Cu(I), Hurtley reaction, 46; methoxyphenyl anions, collision-induced dissociation, 248; oxidative polymerization of 2,6-dimethylphenol, 97; 4-coordinated P compounds, hydrolysis, 55; [8]paracyclophane formation and fragmentation, 240; styrene oxidation, 93; toluene oxidation by O_2 or H_2O_2 , Cu(I)-mediated, 103; trimethoxybenzene, methoxy displacement, 443
- Meisenheimer salt**, trimethoxybenzene, methoxy displacement, 443
- Mesophase**, 1,2-propanediols, 197
- Meta photocycloaddition**, (thesis), 310
- Metal surfaces**, Shustorovich's Bond-Order Conservation, 59
- Metal-metal interaction**, in indium(I) and thallium(I) cyclopentadienyl, 187
- Metalloboranes**, (book), 594
- Metallomacrocycles**, (thesis), 402
- Metathesis**, propene, 77
- Methacrylates**, bismuth trihalide complexes, 176; poly(hydroxyalkyl -), static secondary-ion mass spectrometry (SSIMS), 367
- Methanation**, CO_2 , 332
- Methoxide**, with 3,4'-diquinolyl sulfides, 509
- Methoxybenzenes**, methoxy displacement, 443
- Methoxyphenyl anions**, dissociation, 248
- 3',5'-Methylene linkage**, in oligodeoxynucleotides, 449
- 3-Methylene-2-alkoxytetrahydrofurans**, from organozinc, 29
- Metopon**, etheno-bridged analogs, 353
- Micellar rate effects**, 2,4-dinitrophenyl phosphate hydrolysis catalysis, 64
- Michael reaction**, in amine alkylation, 474
- Microwave discharge**, $\text{N}_2\text{O} \rightarrow \text{O}(^3\text{P})$, oxygenation of benzene derivs., 346
- MNDO**, see quantum chemistry
- MO (Molecular Orbital)**, see quantum chemistry
- Molecular mechanics**, 2,4:3,5-di-*O*-methylene-L-idaric and -D-glucaric acid, 181
- Molecular orbital**, see quantum chemistry
- Molecular structure**, 1-phenylcyclopropanamine, 375
- Molybdenum**, $\text{MoO}_3/\text{Al}_2\text{O}_3$ catalyst in propene metathesis, 77
- Morphinan peptides**, 413
- Morphinone**, etheno-bridged analogs, 353
- MS (Mass Spectra)**, see also GC-MS; μ -cyano(octaethylporphyrinato)-cobalt(III), 235; demethylretinals, deuteriated, 160; labeled lysine, 277; labeled tryptophan, 287; methoxyphenyl anions, 248; spheroidene, 378; spiro[cycloalkanephenalenes], 403; static secondary-ion - of poly(hydroxy-alkyl methacrylates), 367
- NAD(P)H**, in papain modification, 299
- NADH model**, benzoin reduction, 434
- Naphthalenes**, 1,2-dihydro-, photochemistry, 168
- Natural products**, stereoselective synthesis (book), 364
- Negative chemical ionization**, methoxyphenyl anions, 248
- Neopentane**, conversion catalyzed by Pd, 81
- Nickel**, aza-crown ether complex, benzyl chloride electroreduction, 515; CO_2 -hydrogenation catalyst, 332
- Nicotinamidium**, linked to papain, 299
- Nitration**, (book), 594
- Nitrogen oxide**, adsorption on Pt/Rh alloy, 127
- NMR**, ^{13}C , amine alkylation by maleate, 474; BiCl_3 complex with CO compounds, 176; demethylretinals, deuteriated, 160; 2,4:3,5-di-*O*-methylene-L-idaric and -D-glucaric acid, 181; *N,N*-dialkylbenzenediamines, 337; 1,4-dihydropyridines contg. complexing ligands, 388; etheno-bridged analogs, 353; glyoxal acetalization, 15; labeled lysine, 277; labeled tryptophan, 287; morphinan peptides, 413; spiro[cycloalkanephenalenes], 403
- NMR**, ^1H , amicyanin and cytochrome C550 (thesis), 490; μ -cyano(octaethylporphyrinato)cobalt(III), 235; 2,4:3,5-di-*O*-methylene-L-idaric and -D-glucaric acid, 181; *N,N*-dialkylbenzenediamines, 337; 1,4-dihydropyridines contg. complexing ligands, 388; 3,4'-diquinolyl sulfides, NOE, 509; etheno-bridged analogs, 353; α -hydroxy acids, 479; labeled lysine, 277; labeled tryptophan, 287; morphinan peptides, 413; spheroidene, 378; spiro[cycloalkanephenalenes], 403
- NMR**, 2D, 2-enal 1-aryl-2,2-dimethyl-1,3-propanediol acetals, 552
- NMR**, ^{31}P , 4-coordinated P compounds, hydrolysis, 55
- NOE (Nuclear Overhauser Effect)**, see NMR
- Non-heme iron dioxxygenase**, Fe X-ray spectroscopy (review), 133
- Norbornene**, sulfonation, 485
- Nuclear magnetic resonance**, see NMR
- Nucleotides**, oligodeoxy- contg. thymidine, 449; uridine 5'-diphosphate glucoses and mannoses, 583
- 1-Octene**, epoxidation with Pt catalyst, 107
- Octulosonic acid (KDO)**, 273
- Opium alkaloids**, Part XXXII: etheno-bridged metopon analogs, 353; Part XXXIII: etheno-bridged morphinan peptides, 413
- Optical antipodes**, see chirality
- Optical resolution**, azido-glucosyl-inositol, 591
- Optically active α -amino acids**, synthesis (book), 401
- Orbital control**, in reductive cleavage of tris(methoxyphenyl)phosphines, 253
- Organo-**, e.g. organotin, see tin, organo-
- Overcrowding**, in anisole sulfonation by polymethylbenzenesulfonic acids, 41
- Oxidation**, benzene derivs. by $\text{O}(^3\text{P})$ in gas phase, 346; *N,N*-dimethylbenzylamine Pd complex with *tert*-butyl hydroperoxide, 487; 2,6-dimethylphenol, catalyzed by Cu(II), 97; oxidative coupling, Cu(II) imidazole BF_4 catalysis, 70; styrene, 93
- α -Oxo oximes**, photochemistry, 491, 502, 531
- α -oxo sulfines**, cycloaddition to 2-silyloxy-1,3-butadienes, 190
- Oxygen**, adsorption on chelates (review), 31; uptake by Cu(II) imidazole BF_4 complexes, 70
- Ozone**, in benzene gas-phase reactions, 577
- PAH (Polycyclic Aromatic Hydrocarbons)**, cyclopent[hi]aceanthrylene, 463
- Palladium**, catalyst in neopentane conversion, 81; cyclo- compds. with alkynes (review), 567; *N,N*-dimethylbenzylamine complex, oxygenation, 487
- Papain**, modification with NAD(P)H, 299
- [8]Paracyclophane**, 240
- Partial structure factors**, in binary gas mixtures (thesis), 453
- Patai's guide to functional groups**, (book), 308
- (Pentamethylcyclopentadienyl)lanthanum aryloxides**, 226
- N,N,N',N'',N'''*-Pentamethyldiethylenetriamine**, lithiation, 305
- Peptides**, cleaving esters (thesis), 310; contg. ethenomorphinans, 413; phospho- from hydroxy amino acids, 27; poly-, see proteins
- Perchlorates**, (arylsulfonyl)methyl -, deprotonation, 204
- Peroxidase**, in lignin, 255
- pH**, sucrose periodate oxidation, 518
- Ph.D. theses**, see theses
- Pharmacology**, morphinan peptides, 413
- Phenalenes**, spiro[cycloalkanephenalenes], 403
- Phenols**, from benzene derivs. + $\text{O}(^3\text{P})$, 346; 2,6-dimethyl-, oxidative polymerization, 97
- Phenylalanine**, in morphinan peptides, 413
- Phenylboronic acids**, binding sites, 216
- Phenylpotassium**, in dimetallation of benzene, 529
- Phosporus**, 4-coordinated P compounds, hydrolysis, 55
- Phosphates**, cyclic esters, resolution by ephedrine, 523; esters, hydrolysis catalysis, 64
- Phosphines**, allyl anions and trimethylenemethane dianions, stabilized by -, 303; (methoxydiphenyl)diphenyl-, methoxy displacement, 443; tris-(methoxyphenyl)-, reductive cleavage, 253
- Phosphitylation**, hydroxy amino acids, 27
- Phosphopeptides**, from hydroxy amino acids, 27
- Phosphoric amide**, hexamethyl-, see HMPA
- Phosphorylation**, to uridine 5'-diphosphate glucoses and mannoses, 583
- Photochemistry**, aryl ketones, reduction, 325; cycloaddition of anisoles to acrylonitriles, 21; dihydronaphthalenes, 168; α -oxo oximes, Part 10, 491; α -oxo oximes, Part 11, 531; α -oxo oximes, Part 12, 502; photocycloaddition (thesis), 310; photoinduced electron transfer (book), 26; spheroidene, 378; spiro[cycloalkanephenalenes], 403
- Photolysis**, see photochemistry
- Photostationary state (pss)**, 2-(methoxyimino)-1-indanone, 531
- Phthalocyanines**, base for columnar aggregates (thesis), 453; crown ethers, 425; dioxygen adsorption on chelates (review), 31; iodine-doped "crowned", 230; polysiloxanes, 208
- Physical-property prediction**, in org. chem. (book), 365
- Platinum**, amine complexes, with sulfur-contg. biomolecules (thesis), 490; DNA interaction (thesis), 310; 1-octene epoxidation, catalysis, 107; rhodium alloy, adsorption of NO, 127
- Poly(hydroxyalkyl methacrylates)**, static secondary-ion mass spectrometry (SSIMS), 367
- Poly(hydroxycarboxylates)**, Part 6, amine alkylation, 474
- Poly(iminomethylene)**, liquid-crystalline - contg. cholesterol, 561
- Poly(phenylene oxide)**, from Cu(II)-imidazole- BF_4 -catalyzed oxidation, 70; from oxidative polymerization, 97
- Polycondensates**, contg. 2,4:3,5-di-*O*-methylene-L-idaroyl, 181
- Polycyclic aromatic hydrocarbon**, see PAH
- Polyethers**, macrocyclic -, complexing potassium ions, 222

- Polymers**, radiation curing (book), 452
Polymethylbenzenesulfonic acids, anisole sulfonation, 41
Polysaccharides, (book), 307
Polysiloxanes, phthalocyaninato, 208
Polyunsaturated fatty acid, lipoygenase (review), 133
21H,23H-Porphines, see porphyrins
Porphyrins, Co(III) cyanide complex, 235; in hypochlorite epoxidation, 117; Mn(III)- in alkene hypochlorite oxidation, 537
Potassium, - ions, complexed by macrocyclic polyethers, 222; crown ether phthalocyanine complex, 425; PhK in dimetallation of benzene, 529
Prediction of physical properties, in org. chem. (book), 365
Proline, phenylboronic acids, 216
1,2-Propanediols, liquid crystals, 197
1,3-Propanediols, 1-aryl-2,2-dimethyl- acetals, 552; phosphates, resolution by ephedrine, 523
Propanoyl chloride, (S)-2-chloro-, enantiomeric composition of α -hydroxy acids, 479; with poly(hydroxyalkyl methacrylates), 367
Propene, metathesis, 77
Propenylphenol, biopolymer in lignin, 255
Propylene carbonate, BiCl₃ complex, 176
Proteins, Cu complex (thesis), 402; modified papain, 299
Proton transfer, (arylsulfonyl)methyl perchlorates, 204
Proton tunneling, HMPA, 204
Pseudo-enamines, in *N,N*-dialkyl-1,3-dien-1-amines ring closure (review), 311
Pyrazines, from benzene gas-phase reactions, 577
Pyrazoles, from benzene gas-phase reactions, 577
Pyridines, 1,4-dihydro- contg. complexing ligands, 388; NADH model, benzoin reduction, 434
Pyridinium, 1-(5-uracilylmethyl)-, reduction by thiols to thymine, 131
Pyrogallol trimethyl ethers, methoxy displacement, 443
Pyrolysis, see thermochemistry
Pyrophosphates, uridine 5'-diphosphate glucoses and mannoses, 583
3-(1-Pyrrolyldinyl)benzofuran, 481
Pyruvic acid, from carboxylation of acetaldehyde, 359
Quantum chemistry, adsorption of dioxygen on metal chelates, 31; α -oxo oximes, 502; α -oxo sulfines, 190; tris(methoxyphenyl)phosphines, 253; weak-overlap bond (review), 1
Quinolyl sulfides, NOE, X-ray, reactions with NaOMe, 509
Quinone cofactor, Fe X-ray spectroscopy (review), 133
Quinone reductase, in lignin, 255
Radiation curing of polymers, (book), 452
Radicals, in [8]paracyclophane pyrolysis, 240
Radiolabeling, see labeled compounds
Raman, (book), 452
Rational design of resolving agents, Part II, 523
Rayleigh-Brillouin Light scattering spectroscopy, partial structure factors and fast sound in gases (thesis), 453
Reaction mechanism, see mechanism
Rearrangement, see isomerization
Recueil issue, Prof. Wiendelt Drenth, 31, 133
Reduction, tris(methoxyphenyl)phosphines, 253
Regiochemistry, see stereochemistry
Resolution, cyclic phosphates by ephedrine, 523
Resolving agents, rational design, 523
Retinals, demethyl-, deuteriated, 160
Reviews, see also book reviews; cyclopalladium compds. with alkynes, 567; Fe in lipoygenase, X-ray spectroscopy, 133; model for adsorption of dioxygen on metal chelates, 31; *tert*-amino effect, ring closure of *N,N*-dialkyl-1,3-dien-1-amines, 311; weak-overlap bond: an SGF analysis, 1
Rhodium, carbonyl cluster as hydrogenation catalyst, 87; Pt alloy, adsorption of NO, 127
Rigid basket-shaped molecules, 147
Ring closure, anisoles with acrylonitriles, 21; to antirrhine analogs, 397; cyanoalkyl-, in photochemistry of α -oxo oximes, 491; *N,N*-dialkyl-1,3-dien-1-amines (review), 311; etheno-bridged metopon analogs, 353; α -oxo sulfines + 2-silyloxy-1,3-butadienes, 190
Ring opening, in benzene gas-phase reactions by hydrazine/ozone, 577; imidazole ring, 410
Rubidium, crown ether phthalocyanine complex, 425
Saccharides, see carbohydrates
Screw-selective polymerization, iminomethylene contg. cholesterol, 561
Semiconductor, phthalocyaninato polysiloxanes, 208
Sequestration, see complexation
SGF analysis, Simplified Group Function, review, 1
Shustorovich's Bond-Order Conservation, in chemisorption, 59
2-Silyloxy-1,3-butadienes, cycloaddition to α -oxo sulfines, 190
Simmons-Smith reaction, 2-enal 1-aryl-2,2-dimethyl-1,3-propanediol acetals, 552
Simplified Group Function (SGF) analysis, review, 1
Single-chain surfactants, 2,4-dinitrophenyl phosphate hydrolysis catalysis, 64
Small-angle X-ray diffraction, poly(iminomethylene) contg. cholesterol, 561
Smectic A^d, 1,2-propanediols, 197
Sodium methoxide, with 3,4'-diquinolyl sulfides, 509
Soybean lipoygenase, Fe X-ray spectroscopy (review), 133
Spacer-containing fragment, in capsular polysaccharide, 467
Special Recueil issue, Prof. Wiendelt Drenth, 31, 133
Spectroscopic shifts, weak-overlap bond (review), 1
Spheroidene, labeling, 378
Spiro compounds, from α -oxo sulfines + 2-silyloxy-1,3-butadienes, 190; Spiro[cycloalkanephenalenes], 403
Stannylene, metal-metal interaction, 187
Static secondary-ion mass spectrometry (SSIMS), poly(hydroxyalkyl methacrylates), 367
Stereochemistry, antirrhine analogs, 397; azido-glucosyl-inositol, stereospecific glycosidation, 591; benzoin reduction by NADH model, 434; capsular polysaccharide, spacer-containing fragment, 467; cycloaddition of anisoles with acrylonitriles, 21; 2-enal 1-aryl-2,2-dimethyl-1,3-propanediol acetals, 552; etheno-bridged metopon analogs, 353; D-galactofuranoside-tetramer, 437; glyoxal acetalization, 15; α -oxo sulfines + 2-silyloxy-1,3-butadienes, 190; 4-coordinated P compounds, hydrolysis, 55; porphyrins in HOCl/ClO epoxidation, 117; stereoselective synthesis of natural products (book), 364; tantalum(V)azacyclopropane complex, 361
Steroids, cortico- (thesis), 402
Structure, see crystal structure
Structure and reactivity, (book), 309
Styrene, oxidation, 93
Substituent effects, porphyrins in HOCl/ClO epoxidation, 117; weak-overlap bond (review), 1
Sucrose, periodate oxidation, 518
Sugars, see carbohydrates
Sulfides, 3,4'-diquinolyl -, NOE, X-ray, reactions with NaOMe, 509
Sulfines (thione oxides), α -oxo -, cycloaddition to 2-silyloxy-1,3-butadienes, 190
Sulfonate sulfate anhydrides, in norbornene sulfonation, 485
Sulfonation, anisole, 41; norbornene, 485
Sulfonylmethyl perchlorates, deprotonation, 204
Sulfur trioxide, with norbornene, 485
Sulfur-contg. biomolecules, with amine Pt complexes (thesis), 490
Sultones, in norbornene sulfonation, 485
Supercritical fluids, (book), 566
Surface reactivity, Shustorovich's Bond-Order Conservation, 59
Surfactants, 2,4-dinitrophenyl phosphate hydrolysis catalysis, 64; octyl 6-O-acyl- α -D-glucopyranosides, 429
Tantalum(V), alkylidene complex, 446; azacyclopropane complex, 361
Tautomerization, imidazole group in 1,4-dihydropyridines, 388
Temperature-Programmed Reduction (TPR), carbon monoxide oxidation, 112
Tert-amino effect, *N,N*-dialkyl-1,3-dien-1-amines ring closure (review), 311; thieno[3,2-*e*]indolizines and -[2,3-*c*]quinolizines, 481
Tetraazapentenes, from imidazole ring cleavage, 410
Tetrahydrofurans, 2-alkoxy-3-methylene-, from organozinc, 29
 α -Tetralone, photoreduction by amides and lactams, 325
Tetraoxadecalines, glyoxal acetalization, 15
TGA (Thermogravimetric Analysis), μ -cyano(octaethylporphyrinato)cobalt(III), + DTA, 235; 2,4:3,5-di-O-methylene-L-idaroyl-contg. polymers, 181; poly(iminomethylene) contg. cholesterol, 561
Thallium(I) cyclopentadienyl, metal-metal interaction, 187
Thebaine, 5-methyl-, for etheno-bridged metopon analogs, 353
Thermal generation of aromas, (book), 401
Thermal-desorption spectroscopy (TDS), on adsorption of NO on Pt/Rh alloy, 127
Thermochemistry, CO₂ hydrogenation by Ni on alumina, 332; hydrogenation catalyzed by Rh, 87; neopentane conversion, catalyzed by Pd, 81; [8]paracyclophane, 240; propene metathesis, 77
Thermodynamics, 4-coordinated P compounds, hydrolysis, 55; (pentamethylcyclopentadienyl)lanthanum aryloxides, 226; phenylboronic acids, binding, 216
Thermogravimetric Analysis, see TGA
Thermogravimetry, see TGA
Thermotropy, 1,2-propanediols, 197
Theses, amicyanin and cytochrome C550, ¹H NMR and EXAFS, 490; amine Pt complexes, with sulfur-contg. biomolecules, 490; columnar aggregates based on phthalocyanine, 453; corticosteroids, 402; ester cleavage by histidine-containing oligopeptides at micelles, 310; liquid crystals in amphiphiles, 310; meta photocycloaddition, 310; metallomacrocycles, 402; modeling blue copper site with imidazole-thioether ligand, 402; partial structure factors and fast sound in binary gas mixtures, 453; Platinum-DNA interaction, 310
2-Thiacyclohexanone S-oxides, from α -oxo sulfines + 2-silyloxy-1,3-butadienes, 190
Thiamin, in carboxylation of acetaldehyde, 359
2-Thiapyranone S-oxides, from α -oxo sulfines + 2-silyloxy-1,3-butadienes, 190
Thieno[2,3-*c*]quinolizines, *tert*-amino effect, 481
Thieno[3,2-*e*]indolizines, *tert*-amino effect, 481
1-Thio- α -D-galactofuranoside, for tetramer, 437
Thioether, Cu(II) BF₄ complex as oxidation catalyst, 70
Thiols, reducing 1-(5-uracilylmethyl)pyridinium to thymine, 131
Thione oxides, see sulfines
Thiophenes, (dialkylamino)-, 481
Thiophilic promoter, for D-galactofuranoside tetramer, 437
9H-Thioxanthene, photoreduction by amides and lactams, 325
Thymidine, in oligodeoxynucleotides, 449
Thymine, from 1-(5-uracilylmethyl)pyridinium, 131
Tin(II), diorgano-, metal-metal interaction, 187
Toluene, Cu(I)-mediated oxidation, 103; gas-phase reactions by hydrazine/ozone, 577
Transduction, macrocyclic polyethers + K⁺, 222
Transport, phthalocyaninato polysiloxanes, 208
Transsulfonation, anisole, 41
Triamcinolone acetone, (thesis), 402
Tribute, Prof. Wiendelt Drenth, 31, 133
(Trifluoromethyl)benzene, gas-phase reactions by hydrazine/ozone, 577
1,2,3-Trimethoxybenzenes, methoxy displacement, 443
Trimethylenemethane dianions, phosphino-stabilized -, 303
Triplet oxygen, with benzene derivs. in gas phase, 346
Tris(methoxyphenyl)phosphines, reductive cleavage, 253
Tryptophan, labeling, 287
Twin-tailed surfactants, 2,4-dinitrophenyl phosphate, hydrolysis catalysis, 64
Ultraviolet, see UV
1-(5-Uracilylmethyl)pyridinium, reduction by thiols to thymine, 131
Uridine 5'-diphosphate, glucoses and mannoses, 583
UV (UltraViolet), alkene hypochlorite oxidation, ¹⁸O labeling, 537; 9-arylaridinium complexes, 154; μ -cyano(octaethylporphyrinato)cobalt(III), 235; demethylretinals, deuteriated, 160; spiro[cycloalkanephenalenes], 403
Valence-bond approximation, Shustorovich's Bond-Order Conservation, 59

- Vanadium**, catalyst in styrene oxidation, 93
Vibronic spectra, organic gadolinium compounds, 172
Voltammetry, see cyclic voltammetry
Wacker catalyst, vanadium in styrene oxidation, 93
Wave function, weak-overlap bond (review), 1
Weak-overlap bond, review, 1
Wittig reaction, for octulosonic acid (KDO), 273
Wood, biodegradation, 255
X-ray analysis, see crystal structure
X-ray diffraction, small-angle -, poly(iminomethylene) contg. cholesterol, 561
X-ray spectroscopy, Fe in lipxygenase (review), 133
X-ray-excited luminescence, organic gadolinium compounds, 172
9H-Xanthenone, photoreduction by amides and lactams, 325
Zeolite, catalyst in neopentane conversion, 81
Zinc, complexed by 1,4-dihydropyridines contg. complexating ligands, 388;
organo- with aldehydes and ketones, 29

